## BIBLIOGRAPHICAL NOTICE.

L'Évolution Sexuelle dans l'Espèce humaine. Par le Dr. HENRI SIGARD, Doyen de la Faculté des Sciences de Lyon. Avec 94 figures intercalées dans le texte. Paris : Libraire F. B. Baillière et Fils, 1892.

This little volume contains much information relating to the development of animals and the peculiarities of their life-history in all its main outlines, beginning with the asexual forms—parthenogenesis establishing a "passage" to the sexual. Sexual evolution in the Darwinian sense—that is, from the variability where the cause is unknown, gradually developed by natural selection—finds little or no place in it, notwithstanding its title. But we have numerous facts respecting secondary characters, amounting in some species to dimorphism. Sexual selection, it is contended, tends to develop such characters, for, as the greatest dissimilarity favours progress, whatever has the effect of diminishing it "is in opposition to the teaching (données) of biology." "Many points remain obscure," our author admits : for instance, among insects the occurrence of apterous females in species closely allied to others where the sexes are scareely distinguishable.

Perhaps the most valuable part of the work is the account of the development of the embryo, including a notice of the once hotlycontested gastræa-theory. "Differentiation of the sexes" and "of secondary sexual characters in general" follow. The seventh chapter applies to man only—his anatomy and "mental constitution." The concluding chapter treats of the various races of mankind, illustrated by a number of characteristic portraits, and giving many curious details: the love of ornamentation seems predominant among the males of savages.

Briefly, the work is a useful summary, a few still-disputed points excepted, of the present condition of our knowledge.

## MISCELLANEOUS.

## On the Genus Polychrysia of Hübner (a Group of Plusiid Moths). By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

In his 'Verzeichniss bekannter Schmettlinge,' at p. 251, Hübner founded a genus *Polychrysia* on the single European species P. *moneta*. The characters given for his genus were, as usual, valueless; but the genus itself is a good one and must be adopted. It is synonymous with the genus *Deva* of American authors and of Walker's 'Supplement,' but has nothing to do with the typical species of that author's genus. Walker described his genus Deva in the twelfth volume of his <sup>6</sup> Catalogue of Lepidoptera Heterocera,' p. 962, and included in it two species, D. stimulans,=Plusiodonta Thome. Guen., and D. conducens,=P. chalcytoides, Guen. On the following page he described another new genus, Gadera, with two species, G. incitans and G. repellens, both without localities, though he concluded that G. repellens was Brazilian. As a matter of fact both are natives of Jamaica.

Now as *P. compressipalpis*, from the United States, is the type of *Plusiodonta*, and differs from all the other species associated with it in its pectinated antennæ, and as the species of *Deva* and *Gadera* differ from one another in no character whatever, the bulk of the species of Guenée's genus *Plusiodonta* fall into *Deva*. Walker; whilst the species referred to *Deva* by Walker, Grote, and myself subsequently, fall into *Polychrysia*, Hübner.

The genus *Polychrusia*, in my opinion, is a true Plusid (whereas *Deva* belongs to the Calpidæ); it differs from typical *Plusia* in its enormously developed Deltoid palpi, the terminal article of which is curved, compressed, and tapering, the fringe of scales being elongated below the article; the outer margin of the primaries is usually, but not invariably, subangulated.

The genus Polychrysia will include P. splendida, = Deva splendida, from Japan; P. c-aureum, = Plusia c-aureum, from Europe; P. mikadina,=Plusia mikadina, from Japan; P. purpurigera,=Deva purpurigera, from the United States; P. moneta,=Plusia moneta, from Europe; and P. palligera,=Deva palligera, from the United States.

Of the above species P. *c-aureum* and P. *mikadina* are nearly allied, but the former has the golden marking on the centre of the primaries of a  $\bigcirc$ -shape, whereas that on P. *mikadina* is comma-shaped,  $\bullet$ ; at the same time it is quite possible that a large series will prove this to be an insufficient distinguishing character.

## Dr. von Lendenfeld on the Central Cavity in Euplectella. By E. A. MINCHIN.

In the last number of this Journal (April 1892, p. 337) Dr. von Lendenfeld calls me to task for having, as he says, attributed to him the statement (which he well terms "preposterous") that the central cavity of *Euplectella aspergillum* is a pseudoscular tube forming part of the inhalant system. He adds that he never doubted the exhalant nature of the central cavity in *Euplectella* and that he fails to see how any one can gather from his statements such a meaning as I impute to them.

No one would gather from reading Dr. von Lendenfeld's note that everything I inferred as to his opinions was supported by full quotations from his writings, and I will therefore content myself by merely amplifying what I have already written.

In the first place I quoted from his 'Monograph of the Horny